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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/586,699

07/20/2006

Yukihiro Naito

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FRISHAUF, HOLTZ, GOODMAN & CHICK, PC
220 Fifth Avenue
16TH Floor
NEW YORK, NY 10001-7708

EXAMINER

VILLECCO, JOHN M

ART UNIT

PAPER NUMBER

2622

MAIL DATE

DELIVERY MODE

08/27/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/586,699	Applicant(s) NAITO, YUKIHIRO	
	Examiner JOHN M. VILLECCO	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 May 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4,6,9 and 19-21 is/are rejected.
- 7) ☒ Claim(s) 2,3,5,7,8 and 10-18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-21 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. **Claims 1, 4, 6, 9, and 19-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Watanabe (Japanese Publ. No. 2001-197372).** U.S. Patent No. 7,092,018 will be used in the discussion of the rejection, since JP Publ. No. 2001-197372 is a priority document to U.S. 7,092,018 and the specification are assumed to be the same.

4. Regarding *claim 1*, Watanabe discloses an image signal process that operates to determine if a pixel is defective or not and stores its address in a memory. More specifically and as it relates to the applicant's claims, Watanabe discloses a normal pixel detection means (deficiency candidate detection circuit, 12) for detecting a pixel to be factored out from among a plurality of pixels of the pixel data based on a pixel to be inspected and a neighboring pixel (col. 6, line 35 to col. 7, line 6) around the pixel to be inspected, and a defective pixel detection means (deficiency determining circuit, 14) for detecting a defective pixel out of remaining pixels from

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among the plurality of pixels that are not factored out by said normal pixel detecting means (col. 4, line 61 to col. 5, line 18). Since Watanabe discloses that the deficiency candidate detection circuit (12) operates to determine a possibly defective pixel and ignores the pixels that are not stored in the position memory circuit (13) it is effectively factoring out the normal pixels.

Furthermore, only the address information of possibly deficient pixels are used in the determination of whether or not the pixel is actually defective. See col. 4, lines 37-60.

5. As for **claim 4**, Watanabe discloses the use of a memory (11) which holds the pixel to be inspected Y(P0) when making a determination if the pixel is possibly defective. Additionally, since all of the pixel of the image pass through the memory (11), it can be broadly stated that it also serves as a memory for the defective pixel detection means (deficiency determining circuit, 14). See col. 5, line 62 to col. 6, line 40.

6. **Claim 6** is considered a method claim corresponding to claim 1. Please see the discussion of claim 1 above.

7. **Claim 9** is considered substantively equivalent to claim 1. Please see the discussion of claim 1 above.

8. With regard to **claims 19-21**, if a pixel is not stored in the memory (13), it can be interpreted as not being defective, and thus, normal.

Allowable Subject Matter

9. Claims 2, 3, 5, 7, 8, and 10-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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10. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims 2, 7, and 10, the primary reason for indication of allowable subject matter is that the prior art fails to teach or reasonably suggest that the normal pixel detection means comprises a level difference calculation means adapted to calculate a level difference between the pixel to be inspected and an neighboring pixel, and a comparison means adapted to compare said level difference with a first threshold, so that when said level difference is less than said first threshold, the pixel to be inspected is determined as normal.

As for claims 3, 8, and 11, the primary reason for indication of allowable subject matter is that the prior art fails to teach or reasonably suggest that the normal pixel detection means comprises a level difference calculation means adapted to calculate level differences between the pixel to be inspected and a plurality of neighboring pixels, a comparison means adapted to compare each of said plurality of level differences calculated at said level difference calculation means with a first threshold, and a determination block adapted to calculate the number of neighboring pixels at which said level difference is less than said first threshold, and to compare the number of neighboring pixels calculated by said calculation with a second threshold, so that when said number of neighboring pixels is greater than said second threshold, the pixel to be inspected is determined as normal.

With regard to claims 5 and 18, the primary reason for indication of allowable subject matter is that the prior art fails to teach or reasonably suggest that the defective pixel detection means advances to a low power consumption mode with clocks stopped when the pixel to be inspected is determined at said normal pixel detection means as normal.

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11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN M. VILLECCO whose telephone number is (571)272-7319. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on (571) 272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JOHN M. VILLECCO/
Primary Examiner, Art Unit 2622
August 26, 2009